TrueNet®

CopperTen® Four Pair F/UTP Plenum Cable

ADC F/UTP CopperTen® cable can be used in data center, communications closet and work station for 10G shielded performance. Installed in high-performance networks world wide, the system's design minimizes alien crosstalk and insertion loss and meets the performance requirements of IEEE 802.3an, ISO 11801 Class EA and TIA/EIA-568-B.2-10 standards.

Features:

- Supports 10 Gigabit Ethernet over shielded copper to a full 100 meters
- 20 year TrueNet CopperTen warranty

SPEC SHEET

www.adc.com • +1-952-938-8080 • 1-800-366-3891

TrueNet®
CopperTen® Four Pair F/UTP Plenum Cable

Specifications

CONSTRUCTION	
Conductor:	23 AWG solid bare copper
Insulation:	Foamed FEP
Separator:	Fluoropolymer
Shield:	Aluminum/polyester foil
Drain Wire:	Stranded tinned copper
Jacket:	Lead free, flame retardant PVC
Nominal O.D.:	.285" (7.2mm)

COMPLIANCES
UL Subject 444
(UL)-C(UL) Type CMP
ICEA S-90-661
NEC 800 Type CMP
TIA/EIA-568-B.2-1 Category 6 Horizontal Cable Requirements
TIA/EIA-568-B.2-10 Augmented Category 6 Horizontal Cable Requirements
ISO/IEC 11801 Category 6 Horizontal Cable Requirements
ISO/IEC 11801 Category 6a Horizontal Cable Requirements

COMMON APPLICATIONS	
4/16 Mb/s Token Ring (IEEE 802.5)	52/155 Mb/s ATM (ATM Forum)
10BASE-T (IEEE 802.3)	622 Mb/s ATM (ATM Forum)
100 Mb/s TP-PMD	1000BASE-T (Gigabit Ethernet)
Broadband & Baseband Video	1 Gigabit Networking System (WGNA)
100BASE-T ("Fast Ethernet")	1.2 Gb/s ATM (ATM Forum)
100BASE-T4 ("Fast Ethernet")	77 Channel Broadband Video
100BASE-TX ("Fast Ethernet")	10GBASE-T Ethernet (IEEE 802.3an)
100VG-Any LAN (IEEE 802.12)	

THERMAL CHARACTERISTICS	
Transport and Storage:	-10°C to 60°C
Installation:	4°C to 50°C
Operation:	-10°C to 60°C

MECHANICAL CHARACTERISTICS	
Bend Radius:	
During Installation:	8 X O.D.
Installed:	4 X O.D.
Pull Tension:	25# (110N)

ELECTRICAL CHARACTERISTICS	
Conductor DC Resistance @ 20°C (Max):	28.6 Ω/1000 ft (9.38 Ω/100 m)
DC Resistance Unbalance (Max):	5%
Mutual Capacitance @ 20°C (Max):	17 pF/ft (5.6nF/100 m)
Operating Voltage (Max):	300 VDC
Worst Case Cable Skew:	45 ns/100 m
Nominal Velocity of Propagation:	72%

TrueNet®

CopperTen® Four Pair F/UTP Plenum Cable

FREQ MHZ	Fitted Impedance Ohms	Insertion Loss dB/100m		Return Loss dB/100m		Pair-Pair NEXT dB/100m		PSNEXT dB/100m	
	Spec	Max	Spec	Min	Spec	Min	Spec	Min	Spec
1	100 +/- 15	1.7	2	24.3	20	85.9	74.3	83.2	72.3
4	100 +/- 15	3.4	3.7	27.1	23	75.9	65.3	73	63.3
8	100 +/- 15	4.8	5.2	29.4	24.5	68.6	60.8	65.4	58.8
10	100 +/- 15	5.4	5.9	31	25	61.5	59.3	59.1	57.3
16	100 +/- 15	6.8	7.4	30.4	25	63.6	56.2	62.7	54.2
20	100 +/- 15	7.6	8.3	31.6	25	65.4	54.8	62.7	52.8
25	100 +/- 15	8.6	9.3	33.1	24.3	62.6	53.3	58.6	51.3
31.25	100 +/- 15	9.7	10.4	34.2	23.6	67.1	51.9	63.5	49.9
62.5	100 +/- 15	13.9	14.9	31.1	21.5	54	47.4	52.5	45.4
100	100 +/- 15	17.9	19	28.9	20.1	52.7	44.3	50.7	42.3
155	100 +/- 15	22.6	24	33	18.8	45.3	41.4	44.7	39.4
200	100 +/- 15	26.1	27.5	23.5	18	50.7	39.8	48.7	37.8
250	100 +/- 15	29.4	31	22.9	17.3	42.3	38.3	41.1	36.3
300	100 +/- 15	32.7	34.2	26.2	16.8	43.1	37.1	40.5	35.1
350	100 +/- 15	35.8	37.2	22.9	16.3	45.2	36.1	42.2	34.1
400	100 +/- 15	38.7	40	21.9	15.9	44.7	35.3	41.4	33.3
450	100 +/- 15	41.5	42.7	22.4	15.5	39.2	34.5	37.8	32.5
500	100 +/- 15	44.1	45.3	20.1	15.2	36.7	33.8	35.2	31.8
550	100 +/- 15	46.9	-	21.7	-	39.9	-	38.6	-
600	100 +/- 15	49.5	-	17	-	36.6	-	34.4	-

FREQ MHZ	Pair-Pair ACR dB/100m		PSACR dB/100m		Pair-Pair ELFEXT dB/100m		PSNEXT dB/100m		Fitted Impedance Ohms
	Max	Spec	Min	Spec	Min	Spec	Min	Spec	Spec
1	84.2	72.3	81.5	70.3	83.8	67.8	83.1	64.8	40.0
4	72.7	61.5	69.8	59.5	75.8	55.8	75.2	52.8	40.0
8	64.1	55.5	60.9	53.5	64.2	49.7	62.5	46.7	40.0
10	56.5	53.4	54.0	51.4	64.0	47.8	60.3	44.8	40.0
16	57.2	48.8	56.3	46.8	63.7	43.7	61.2	40.7	38.0
20	58.1	46.5	55.1	44.5	59.9	41.8	58.4	38.8	37.0
25	54.4	44.0	50.4	42.0	57.5	39.8	56.9	36.8	36.0
31.25	57.5	41.5	53.8	39.5	55.4	37.9	55.6	34.9	35.1
62.5	40.8	32.5	39.3	30.5	52.4	31.9	50.6	28.9	32.0
100	35.7	25.3	33.4	23.3	52.9	27.8	51.1	24.8	30.0
155	23.7	17.5	22.1	15.5	45.4	24.0	43.8	21.0	28.1
200	25.8	12.3	23.8	10.3	46.0	21.8	43.4	18.8	27.0
250	14.2	7.4	12.5	5.4	43.0	19.8	41.0	16.8	26.0
300	11.9	3.0	9.3	1.0	43.0	18.3	39.3	15.3	-
350	11.0	-1.0	8.1	-3.0	39.0	16.9	38.3	13.9	-
400	7.5	-4.7	3.4	-6.7	37.5	15.8	35.7	12.8	-
450	-0.7	-8.2	-2.2	-10.2	38.9	14.7	36.2	11.7	-
500	-5.7	-11.4	-7.2	-13.4	39.5	13.8	35.4	10.8	-
550	-5.6	-	-6.9	-	31.9	-	32.3	-	-
600	-12.9	-	-14.4	-	31.2	-	29.2	-	-

NOTE: The above listed discrete frequency electrical performance values are provided for engineering information only. Actual compliance testing is based on swept frequency measurements. The spec values are based on TIA/EIA-568-B.2-10 specification.

SPEC SHEET

Ordering Information

Description	Catalog Number
1000 foot reel, 42lbs 62kg	10G-A6TPF-XX02

NOTES: XX = Jacket color - BL = Blue, WT = White, GY = Gray

Website: www.adc.com

From North America, Call Toll Free: 1-800-366-3891 • Outside of North America: +1-952-938-8080

Fax: +1-952-917-3237 • For a listing of ADC's global sales office locations, please refer to our website.

ADC Telecommunications, Inc., P.O. Box 1101, Minneapolis, Minnesota USA 55440-1101

104745AE 4/08 Revision © 2008, 2007 ADC Telecommunications, Inc. All Rights Reserved